

Patent Claims

1. An inhalation therapy device comprising
 - a. a nebulising device (1; 2; 30, 31) for nebulising a liquid stored in a storage container (3; 33);
 - b. a sensor means (10) for detecting the temperature (T) of the liquid; and
 - c. a control device (20, 21, 22, 23) for controlling nebulisation of the liquid by the nebulising device (1) in dependence on the temperature (T) detected by the sensor means (10).
2. An inhalation therapy device according to claim 1, characterised in that said nebulising device (1) comprises a nebulising nozzle (2) to which compressed air can be supplied to nebulise the liquid, and that said control device comprises a valve means (21) which influences, in particular allows or interrupts, the supply of compressed air to the nebulising nozzle (2).
3. An inhalation therapy device according to claim 1, characterised in that said nebulising device (1) comprises a nebuliser membrane (30) which can be caused to oscillate by means of an oscillation generating device (31) so as to nebulise a liquid disposed on one side of the membrane, that said control device is connected with an excitation device (34) which excites said oscillation generating device (31), and that said control device (20) controls, in particular activates and deactivates, said excitation device (34).
4. An inhalation therapy device according to one of claims 1 to 3, characterised in that said control device (20) comprises a memory means (23), in which information regarding the relation between the detected temperature and the manner of control of the nebulising device (nebulisation schema), in particular as regards the duration and/or frequency of nebulisation, is stored.
5. An inhalation therapy device according to claim 4, characterised in that a plurality of nebulisation schemata are stored in the memory means.
6. An inhalation therapy device according to claim 5, characterised in that the plurality of nebulisation schemata can be used for different nebulisers and/or medicaments and/or therapies.

7. An inhalation therapy device according to one of claims 5 or 6, characterised in that the control device (20) comprises a selecting means (22), via which one of the nebulisation schemata can be selected by a user.
8. An inhalation therapy device according to one of claims 1 to 7, characterised in that the control device (20) controls the nebulising device (1) such that nebulisation takes place in time intervals whose length is dependent on the temperature of the liquid to be nebulised.
9. An inhalation therapy device according to one of claims 1 to 8, characterised in that said control device (20) controls the nebulising device such that nebulisation takes place in time intervals whose frequency is dependent on the temperature of the liquid to be nebulised.
10. An inhalation therapy device according to one of claims 1 to 9, characterised in that when controlling the nebulising device, the control device (20) takes into consideration an increase in the concentration of the medicament in the stored liquid occurring during a therapy session.
11. An inhalation therapy device according to claim 10, characterised in that said control device (20) comprises a memory means (23) in which information regarding the control taking into consideration the temperature-dependent increase in the concentration of the medicament (nebulisation schema) is stored.
12. An inhalation therapy device according to claim 10, characterised in that said control device (20) takes into consideration the temperature-dependent increase in the concentration of the medicament by shortening the nebulisation intervals.
13. An inhalation therapy device according to claim 10 or 11, characterised in that the control device (20) takes into consideration the temperature-dependent increase in the concentration of the medicament by reducing the frequency of the nebulisation intervals.
14. An inhalation therapy device according to claim 10, 11 or 12, characterised in that the selecting means (22) of the control device (20) is designed for selecting a medicament and/or an initial concentration.

15. An inhalation therapy device according to one of claims 1 to 12, characterised in that the control device (20) determines the administered dose of the medicament based on the duration/frequency of the nebulisation intervals and the concentration of the medicament in the stored liquid, and ends nebulisation upon reaching a predetermined dose.